

Application No.: 09/701,910

2

Docket No.: (AP9265)209565-83110

AMENDMENTS TO THE CLAIMS

1-11 (Canceled)

12. (Currently amended) A device for actuating a brake system to accomplish a brake assist function, comprising:

a control unit for reducing at least one of a damping effect and a counterforce on a brake pedal when the brake assist function is activated,

a sensor for sensing brake pedal actuation, and

wherein the sensed brake pedal actuation is used by the control unit to determine the vehicle deceleration that is to be effected by the brake system,

wherein the counterforce is responsive to pedal travel and rises with an increasing actuating travel.

13. (Previously presented) The device as claimed in claim 12, wherein the counterforce is a function of at least one of brake pedal travel, the speed of brake pedal actuation and the acceleration of brake pedal actuation, and wherein the counterforce is reduced when at least one of the brake pedal travel, the speed of brake pedal actuation and the acceleration of brake pedal actuation exceeds a threshold value.

14. (Canceled)

15. (Previously presented) The device as claimed in claim 12, wherein the damping effect depends on at least one of brake pedal travel, the speed of brake pedal actuation and the acceleration of brake pedal actuation, and wherein the damping effect is reduced when at least one of the sensed brake pedal travel, the speed of brake pedal actuation and the acceleration of brake pedal actuation exceeds a threshold value.

16. (Withdrawn) A device for actuating a brake system to accomplish a brake assist function, comprising:

a control unit for changing a brake force acting in the system as a function of at least one of an actuating travel of a brake pedal as sensed by a brake pedal sensor, an actuating

Application No.: 09/701,910

3

Docket No.: (AP9265)209565-83110

speed of the brake pedal and an acceleration of actuation of the brake pedal when the brake assist function is activated, and wherein the brake force acting in the system corresponds to a ratio between at least one of the determined actuating travel, the actuation speed and the acceleration of actuation of the brake pedal, and a vehicle deceleration to be effected by the brake system.

17. (Withdrawn) The device as claimed in claim 16, wherein the brake force acting in the system is augmented with a rising actuating travel, a rising actuating speed, or a rising acceleration of actuation.

18. (Withdrawn) The device as claimed in claim 16, wherein the brake force acting in the system is reduced continuously to a normal brake force when the actuating travel decreases.

19. (Previously presented) A device for actuating a vehicle brake system to accomplish a brake assist function, comprising:

a control unit for reducing at least one of a damping effect and a counterforce on a brake pedal when the brake assist function is activated,

a sensor for detecting brake pedal actuation, wherein the control unit is coupled to the sensor for determining the vehicle deceleration to be effected by the brake system, and wherein the control unit changes a brake force acting in the brake system depending on at least one of an actuating travel, an actuating speed and an acceleration of actuation of the brake pedal when the brake assist function is activated, wherein the brake force acting in the system corresponds to a ratio between at least one of the actuating travel, the actuating speed and the acceleration of actuation of the brake pedal, and the deceleration to be effected by the brake system.

20. (Canceled)

21. (Withdrawn) A method for actuating a vehicle brake system to accomplish a brake assist function, comprising the steps of:

changing a brake force acting in the system as a function of at least one of :

Application No.: 09/701,910

4

Docket No.: (AP9265)209565-83110

i. an actuating travel of a brake pedal,
ii. an actuating speed of the brake pedal and,
iii. an acceleration of actuation of the brake pedal when the brake assist function is activated, and

wherein the brake force acting in the system corresponds to a ratio between at least one of the actuating travel, the actuating speed and the acceleration of actuation of the brake pedal, and a vehicle deceleration to be effected by the brake system.

22. (Previously presented) A method for actuating a vehicle brake system to accomplish a brake assist function, comprising the steps of:

reducing at least one of a damping effect and a counterforce on a brake pedal when the brake assist function is activated,

determining the vehicle deceleration that is to be effected by the brake system as a function of brake pedal actuation, and

changing a brake force acting in the system depending on at least one of actuating travel, actuating speed and acceleration of actuation of the brake pedal when the brake assist function is activated, wherein the brake force acting in the system corresponds to a ratio between at least one of the actuating travel, the actuating speed and the acceleration of actuation of the brake pedal, and a vehicle deceleration to be effected by the brake system.